

What is claimed is:

1. A synthetic resin retainer comprising an annular member made of a synthetic resin and formed with a plurality of pockets to receive balls, said pockets being cylindrical, wherein a pair of conical guide surfaces to be guided by said balls are formed on the cylindrical inner surface of said each pocket at inner-diameter end thereof so as to oppose each other in the circumferential direction of the retainer, and wherein the radius of curvature of said each conical guide surface at large-diameter end thereof is larger than the radius of curvature of the cylindrical inner surface of said each pocket.
2. A synthetic resin retainer as claimed in claim 1 wherein in the cylindrical inner surface of said each pocket, diametric grooves are formed so as to divide said cylindrical inner surface into four parts comprising a pair of arcuate inner surfaces opposing in the circumferential direction of the retainer, and a pair of arcuate inner surfaces opposing in the axial direction of the retainer.
3. A synthetic resin retainer comprising an annular member made of a synthetic resin and formed with a plurality of pockets to receive balls, said pockets being cylindrical, wherein a pair of conical surfaces are formed on the cylindrical inner surface of said each pocket at inner-diameter end so as to oppose in the circumferential direction of the retainer, wherein a lubricant retaining surface is integrally formed from the inner-diameter end of said each conical surface inwardly of the pocket, and wherein a linear ball guide edge to be guided by a ball is formed inside

said each lubricant supporting surface so as to be parallel to the axis of the retainer.

4. A synthetic resin retainer as claimed in claim 3 wherein in the cylindrical inner surface of said each pocket, diametric grooves are formed so as to divide said cylindrical inner surface into four parts comprising a pair of arcuate inner surfaces opposing in the circumferential direction of the retainer, and a pair of arcuate inner surfaces opposing in the axial direction of the retainer.

5. An angular ball bearing comprising a synthetic resin retainer mounted between an outer ring and an inner ring, and balls mounted in a plurality of pockets formed spaced circumferentially from each other in said retainer to support said outer ring and said inner ring so as to be rotatable relative to each other, wherein said pockets are cylindrical, wherein in the cylindrical inner surface of said each pocket, diametric grooves are formed so as to divide said cylindrical inner surface into four parts comprising a pair of arcuate inner surfaces opposing in the circumferential direction of the retainer, and a pair of arcuate inner surfaces opposing in the axial direction of the retainer, wherein a pair of conical guide surfaces to be guided by said balls are formed on the cylindrical inner surface of said each pocket at inner-diameter end thereof so as to oppose each other in the circumferential direction of the retainer, and wherein the radius of curvature of said each conical guide surface at large-diameter end thereof is larger than the radius of curvature of the cylindrical inner surface of said each pocket.

6. An angular ball bearing comprising a synthetic resin retainer mounted between an outer ring and an inner ring, and balls mounted in a plurality of pockets formed spaced circumferentially from each other in said retainer for supporting said outer ring and said inner ring so as to be rotatable relative to each other, wherein said pockets are cylindrical, wherein in the cylindrical inner surface of said each pocket, diametric grooves are formed so as to divide said cylindrical inner surface into four parts comprising a pair of arcuate inner surfaces opposing in the circumferential direction of the retainer, and a pair of arcuate inner surfaces opposing in the axial direction of the retainer, wherein a pair of conical surfaces are formed on the cylindrical inner surface of said each pocket at inner-diameter end so as to oppose in the circumferential direction of the retainer, wherein a lubricant retaining surface is integrally formed from the inner-diameter end of said each conical surface inwardly of the pocket, and wherein a linear ball guide edge to be guided by a ball is formed inside said each lubricant supporting surface so as to be parallel to the axis of the retainer.